REMARKS

Claims 1-21 are pending.

Claims 19-20 have been withdrawn.

Claims 1-18 and 21 are rejected

ELECTION/RESTRICTION

Claims 19 and 20 were previously withdrawn pursuant to the restriction requirement.

SPECIFICATION REJECTION –35 U.S.C. §132

In response, the Abstract has been amended to replace "composite" with "particle" since "particle" is the word originally used in the Specification.

Additionally, the Abstract now states that toner and colorant particle size is "equal to or less than about 10 microns" and that surface additive size is "less than about 40 nanometers". Support for these size dimensions is found n the original Specification on page 25, lines 3-7 and on page 26 at lines 14-19.

CLAIMS REJECTIONS – 35 U.S.C. §112

Claims 1-18 and 21 were rejected under 35 U.S.C. 112, first paragraph, failing to comply with the written description requirement. Claim 1 has been amended to now state that toner and colorant particle size is "equal to or less than about 10 microns" and that surface additive size is "less than about 40 nanometers". Support for these size dimensions is found n the original Specification on page 25, lines 3-7 and on page 26 at lines 14-19.

Claim 15, the other independent claim, has been amended to substitute "particles" for "composites" to return the language to the form in which it was originally filed.

CLAIMS REJECTIONS – 35 U.S.C. §103

Claims 1-18 and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (6,245,474) in view of Combes (5,714,299). In response, neither Hsu nor Combes disclose or teach any limitations regarding the adhesion forces by which surface additives are attached to toner particles. Even if these two references are combinable, they thus lack any teaching regarding key limitations of Claims 1 and 15, the two independent claims. The Second Office Action states that "a structural difference must exist between the claimed invention and the prior art in order to patentably distinguish the claimed invention form the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim." The Second Office Action thus argues that for patentable distinctions, Applicant must show both a structural difference and differentiated performance for the intended use. As for structural difference, The Declaration of Dr. Samir Kumar, which was submitted with the First Amendment, states:

> ...[U]ntil the advent of the high-intensity blending tool described in the present Application, on one had produced a 15 micron or smaller toner with 2% external surface additive by weight with such high additive adhesion strength (the AAFD percent value after 12kJ of sonification energy is greater than 40 percent). Without high intensity blending, such a toner could not be produced because the conventional forces of impaction, even if blended for a long period, would not result in the adhesion of that much additive to the surface of such a small toner. Declaration, Paragraph 4, pages 2-3.

There is thus an unrebutted factual statement that the structure of the claimed toner differs from prior art structures by the force by which surface additives are adhered to the toner particle. See also Figure 7 in the Application and all of the text on pages 25-26 that describes the structural differences revealed by the data charted in Figure 7.

Differentiated (improved) performance of the claimed toner over the prior art is set forth in several places of the Specification, including page 22, lines 3-14 and page 24, line 17-page 25, line 2. The concept is very simple: in order to make high weights of surface additives to stick to toner particles with sufficient force to withstand the intensities of modern image development processes, a process is needed to increase the force of impaction that makes additives stick to toner particles, i.e., that pounds the additives sufficiently into the toners so that the additives don't simply fall off when used. A high intensity blending tool such as that described in the Specification is necessary to achieve such force of impaction (as measured and confirmed by AAFD values). As stated by Dr. Kumar, "Without high intensity blending, such a toner could not be produced because the conventional forces of impaction, even if blended for a long period, would not result in the adhesion of that much additive to the surface of such a small toner."

There is thus unrebutted evidence of structural differences between the claimed toner and toners of the prior art. Neither Combes nor Hsu discuss adhesion values, and Dr. Kumar, who supervises some of the inventors of those patents, states that the toners of those inventions did not and could not have the same adhesion values. There is also uncontroverted evidence that increased surface additives with high AAFD values improve performance of the toner. Both prongs of the test offered in the Office Action have been met. Accordingly, claims 1 and 15, the two independent claims in the Application, are allowable over Hsu and Combes and the combination thereof. All other claims in the application depend from claims 11 or 15 and are accordingly also allowable.

The application and claims are believed to be in a condition for allowance in their present form and which allowance is respectfully requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, the Examiner is hereby authorized to call Applicant's Attorney, Richard F. Spooner, at Telephone Number (585) 423-5324, Rochester, New York.

Respectfully submitted,

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